

II. Remarks

Claims 1 and 4-20 were pending in this application. Claims 10, 12-17, 19 and 20 have been withdrawn from consideration. Claims 2-3 have been cancelled. Claims 1, 4-9, 11 and 18 have been rejected. The present amendment amends claim 1 to more particularly point out and clarify Applicant's invention. Support may be found in paragraphs [0047] to [0059] of Applicant's application. No new matter has been added. After this amendment, claims 1 and 4-20 will be pending.

Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

Rejection under 35 U.S.C. § 112

Claims 1, 4-9, 11 and 18 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the matter which is regarded as the invention. In view of the amendments and remarks contained herein, Applicant respectfully submits that the rejections of claims 1, 4-9, 11, and 18 are traversed.

Claim 1 as amended no longer recites the term *initially selecting*, and now recites a *control mechanism operable to select or maintain the first energy absorbing level upon locking of the retractor by the locking device*. Thus, after the locking of the retractor, the first energy absorbing level is active, regardless of whether it was selected, or if it was maintained.

Additionally, claim 1 as amended now recites *to implement ... either of but not simultaneously both of selecting a second energy absorbing level ... or preventing the effective selection of the second energy absorbing level*. As such, the claim language does not imply that the second energy absorbing level would always be selected, since the claim language *either of but not simultaneously both of* requires that if *preventing the effective selection of the second energy absorbing level* occurs, then *selecting a second energy absorbing level* cannot occur, and vice versa. Also, choosing between *selecting...* and *preventing...* is based on movement caused by an *initial belt force*, which cannot be simultaneously *lower than a predetermined force* and *greater than the predetermined force*. Thus, the second energy absorbing level would not always be selected.

Accordingly, Applicant believes that the rejections of claim 1 and its dependent claims 4-9, 11 and 18 should be withdrawn.

Rejection under 35 U.S.C. § 102

Claims 1, 4-9, 11, and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,616,081 issued to Clute, et al. ("Clute"). In view of the amendments and remarks contained herein, Applicant respectfully submits that the rejections of claims 1, 4-9, 11, and 18 are traversed.

Applicant's invention is concerned with providing a seat belt retractor to reduce forward excursion (displacement) of an occupant in an accident situation. In particular, more energy is to be absorbed from a heavy person than a light person and/or from a person in a severe high speed accident than a person in a low speed

accident. The seat belt retractor comprises a load limiter that provides a first relatively high energy absorption level and a second relatively low energy absorption level to permit the restricted paying out of the seat belt webbing while controlling belt loading. The load limiter is in the form of a two section torsion bar having a stiff or wide diameter cross-section, and a soft or narrow diameter cross-section. A control mechanism is operable to select between the energy absorption levels in response to crash related signals. The control mechanism selects the second energy level from the initially selected first energy level when the initial belt force is less than a predetermined force and further, prevents the selection from the first energy level to the second energy level when the initial belt force is more than the predetermined force. Advantageously, the control mechanism directly prevents the effective selection of the second low energy absorbing level via relative movement in the mechanical arrangement, without the generation and processing of any electric control signals, a very fast acting operation may be achieved at a relatively low cost for which more energy may be absorbed for example by a heavy person in an accident situation and/or a person in a severe high speed accident. Further discussion of these features is found in Applicant's application at paragraphs [0004] and [0009]-[0010]. Accordingly, claim 1 has been amended to recite *a control mechanism operable to select or maintain the first energy absorbing level upon locking of the retractor by the locking device, the control mechanism further operable to implement, in response to a crash related signal after completion of the selection or the maintenance of the first energy absorbing level, either of but not simultaneously both of selecting a second energy absorbing level based on the*

occurrence of a relative movement between two components corresponding to and caused by an initial belt force that is less than a predetermined force, or preventing the effective selection of the second energy absorbing level, thereby maintaining the first energy absorbing level, based on the relative movement between the two components corresponding to and caused by an initial belt force that is greater than the predetermined force.

Clute discloses a belt retractor 10 with a two energy absorbing element force limiting device in the form of a torsion bar 13 having a high force section 14 and a low force section 15. A switching device for switching from the higher force level section 14 to the lower force level section 15 is formed via pawls 21 that couple the belt spool 12 and a torque tube 18 such that when the pawls 21 are in the coupled position force flows from the spool 12 via the torque tube 18 to section 14 of the torsion bar 13. If the pawls 21 are disengaged from the torque tube 18 by the actuation of the switching device, the spool 12 can rotate relative to the torque tube 18, and now force flows to section 13 of the torsion bar 13 (*Clute* at Col. 3, line 45-Col. 4, line 14). This belt force limitation created in the retractor cooperatively coordinated with the airbag located in the vehicle where “the point in time at which the switch takes place from the higher force level to the lower force level is very important.” In a first embodiment, Clute discloses that the switch from the higher force level to the lower force level is provided by a time switch after a pre-selected period of time has occurred. In a second embodiment, Clute discloses that the switch from the higher force level to the lower force level is provided by a device for determining the number of revolutions of the spool after a pre-selected threshold has

been exceeded (*Id.* at Col. 2, line 53-Col. 3, line 8). That is, Clute's switching device for the belt retractor 10 is initially selected in the higher force level and (1) switches to select the lower force level after either a pre-selected time threshold or a pre-selected revolutions of the spool has been exceeded. Notably, Applicant's control mechanism selects the lower energy absorbing level when the initial belt force is less than a predetermined force, and not when either a pre-selected time period or pre-selected revolutions of the spool have been exceeded. Moreover, Clute fails to disclose that (2) switching device prevents switching from the higher force level to the lower force level when an initial belt force is greater than the predetermined force, thereby maintaining the higher force level.

This is unlike amended claim 1 which recites *to implement ... either of but not simultaneously both of selecting a second energy absorbing level based on ... an initial belt force that is less than a predetermined force, or preventing the effective selection of the second energy absorbing level, thereby maintaining the first energy absorbing level, based on ... an initial belt force that is greater than the predetermined force.*

Clute does not disclose that the choice between *selecting* or *preventing* depends on the *initial belt force* being *less* or *greater than a predetermined force*. For example, in Clute, even if an initial belt force is greater than a predetermined force, the second energy level is selected after a pre-selected time threshold or a pre-selected number of revolutions of the spool, which is impossible in claim 1.

In that Clute lacks the noted elements of claim 1, the rejections based thereon should be withdrawn. Accordingly, Applicant believes that claim 1 and its dependent claims 4-9, 11 and 18 are in a condition for allowance.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted,

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